



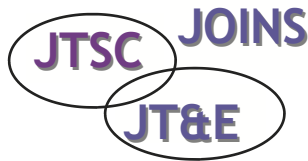
# J T & E NEWSLETTER



VOLUME 5, NUMBER 2 May 2004

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The Joint Test Support Cell (JTSC) is a component of the JT&E Program Office that has been formed to shorten the time required to conduct a Joint Feasibility Study (JFS); and the development of the Program Test Plan that is a product of the JFS. The JTSC will effectively reduce the time to charter a JT&E project from approximately 22 months to seven months. The JTSC is composed of personnel who are experienced in the development of test and evaluation plans that address improvements to joint operational requirements and capabilities. In addition, the men and women who compose the JTSC bring military and government service backgrounds that collectively represents the four military Services and the joint community. This core of joint and multi-Service expertise provides the DOT&E JT&E Program Manager the capability to address a multitude of military problems in a more timely, thorough, and efficient manner than previously possible.

The JTSC is located at the JT&E Suffolk, VA facility. They provide support for two distinct types of JT&E projects: Quick Reaction Test (QRT) that last 12 months or less and more traditional JT&E projects that last no more than 3 years for the date of formal charter. QRTs are approved by an Executive Steering Committee (ESG) chaired by DOT&E and primarily composed of the commanders of the four Service operational test agencies (OTAs) who are responsible for executing the QRT project. JTSC involvement in QRTs is minimal, on a case-by-case basis as requested by the lead Service OTA and assigned by the JT&E Program Manager. The traditional JT&E projects are approved by the DoD Senior Advisory Steering Committee (SAC). JTSC support begins immediately after SAC directs a nomination to become a JT&E project and formally concludes when the JT&E Program Test Plan is signed.

## JSWORD QRT

### New Quick Reaction Test Approved

The JT&E Program Office convened the first ESG meeting for the purpose of reviewing and approving the Joint Shipboard Weapons and Ordnance (JSWORD) QRT project. The objective of the JSWORD QRT project is to test and evaluate a process that leads to the documentation and publishing of a standard joint procedure for tube loading the 2.75-inch Folding Fin Aerial Rocket (2.75" FFAR) on U.S. Army and USSOCOM helicopters with engines running and blades turning while onboard U.S. Navy air capable ships. As a result of this QRT, it is expected that US Army and USSOCOM helicopters will be able to train and tactically operate from U.S. Navy ships without requiring waivers when using the 2.75" FFAR. A by-product from this test project is expected to enable the joint community and Services to more rapidly shipboard certify other aviation munitions needed to support ongoing and emergent contingency operations.

## GPS COORDINATE AND REPORTING STANDARDIZATION (GCRS) PROGRAM



**MH-53J PAVE LOW used by  
Air Force Special Operations**

Joint Global Positioning System Combat Effectiveness (JGPSCE) completed a GPS Coordinate and Reporting Standardization (GCRS) Study. GCRS was a six-month team effort between JT&E, JTSC, JFCOM, JGPSCE, and AFOTEC/Det1. GCRS aims to remove the fog and friction in wartime that arises out of non-standard GPS coordinate formats and how they are reported during military operations. Differences in how coordinates are displayed and reported can result in errors on the surface of the earth of

*(Continued on page 2)*

### Inside this issue:

GYPSY DELTA	2
GYPSY CHARLIE	3
NAVWAR MOU	4
JCMD ST-2	4
Administrative Training	5
GPS Conference	6
JT&E POCs/Calendar	6

# GYPSY DELTA

The GYPSY DELTA test team is well into preparation for the culminating event of the JGPSCE test project. The fourth and final test event will determine the impacts of GPS Electronic Warfare and Electromagnetic Interference on the Joint Targeting Cycle at the operational level of warfare. The test will be conducted as an adjunct to U.S. Joint Forces Command (USJFCOM) Exercise CJTFEX 04-2, in June of this year. CJTFEX 04-2 is a large-scale exercise involving live, virtual, and constructive participation of Army, Navy, Air Force and several allied national forces. It will be conducted from multiple locations along the east coast. Along with several other participating JT&Es, GYPSY DELTA will provide insights into the challenges and opportunities arising from the new paradigm of combined training and testing. Additionally, by controlling this test from the Air Force Distributed Mission Operations Center (DMOC) at Kirtland AFB, New Mexico, JGPSCE is leveraging some of the emerging distributed training and testing potential of the Joint National Training Capability (JNTC). Demonstration of the JNTC initial operational capability (IOC) is a JFCOM objective for CJTFEX04-2.

In GYPSY DELTA, the test focus shifts from platforms and tactical processes to the operational level of war, within the context of the Combined Aerospace Operations Center. Live GPS jammers will present a representative threat to the various Intelligence, Surveillance and Reconnaissance (ISR) platforms that alert the Joint Forces Air Component Commander (JFACC) to the presence of GPS jamming. GYPSY DELTA will assess the effect of the knowledge of GPS jamming on JFACC actions within the Joint Targeting Cycle. Additionally, JGPSCE will analyze the performance of certain air platforms in the presence of degraded GPS. GYPSY DELTA test results will provide insights to combatant commanders in the areas of joint doctrine, tactics, techniques and procedures (TTPs) and materiel deficiencies.

For more information on GD, contact the GD Test Manager, LTC Murton at 505-846-1795 (DSN 246) or e-mail [mark.murton@afotec.af.mil](mailto:mark.murton@afotec.af.mil).

*(GCRS-Continued from page 1)*

up to 1.4 km.

JGPSCE and AFOTEC/Det1 focused on the Combat Search and Rescue and Special Operations Forces Insertion missions to determine the root causes of potential problems. Mission requirements and the lack of standardized datums around the world have required that GPS receivers be flexible enough to work with any possible combinations of conditions. However, we found that training has not always adequately prepared personnel to understand the reference system they are using, nor the data formats they are using for reporting. The result is that a coordinate read out such as: "90...45...33...55" could be part of a UTM number, could mean 90 deg, 45 minutes, 33.55 seconds—or it could mean 90 degrees, 45.3355 minutes, etc.

The operational impact of this uncertainty is increased exposure to enemy fire, potential of fratricide, collateral damage, and additional time and resources to accomplish the mission.

**Mission Success depends on fast, accurate, and unambiguous GPS coordinate reporting.**

JGPSCE and AFOTEC/Det1 finalized the findings and recommendation in a report published March 31, 2004. The JGPSCE contact is Lt Col Mark Torres, 505-853-0090 (DSN 263) or e-mail [mark.torres@afotec.af.mil](mailto:mark.torres@afotec.af.mil).

# GYPSY CHARLIE Test

True to their name, members of the JGPSCE test team started off the new year traveling the skies as storytellers, briefing GYPSY CHARLIE test findings to a variety of audiences.

GYPSY CHARLIE, or GC for short, is JGPSCE's most recently completed test event and was an overwhelming success. Though JGPSCE is a small organization (35 persons), this veteran test team is used to doing things in a big way and GC represented another step up in the level of test complexity. Conducted entirely on the Nellis Test & Training Range in Nevada, the GC test evaluated the effects of GPS electronic warfare (EW) and electromagnetic interference (EMI) on the performance of integrated tactical systems, namely: command and control systems (C2); intelligence, surveillance and reconnaissance systems (ISR); and strike weapons systems conducting precision engagements in an operationally realistic threat environment.

Amassing almost 600 people from 25 units and deploying almost two dozen aircraft (including a who's-who of high-value assets such as AWACS and Joint STARS), the 2-week test centered around tactical warfighters as they performed sensor-to-shooter kill chain operations in challenging time-critical targeting scenarios. The final numbers are impressive. Conducting their test operations entirely at night, the GC team flew almost 200 sorties for over 780 flying hours and collected a tremendous quantity of critical GPS vulnerability data - all without any significant cancellations or deviations from their original test plan. There were no "cease-buzzer" calls during the entire test event.

The GC team's superior efforts didn't end when the test was done. Over the next two and a half months, the team kept a grueling schedule, poring over reams of test data, making sense of it, producing a quick look report within 30 days, creating a final results brief, and delivering a comprehensive GC test report to the JT&E Program Office before the holiday break.

With the hard work of GC behind them, the JGPSCE team plunged into planning for the last



SRA Clayton Gibbs (left) and Crew aboard a Joint STARS aircraft from 116 Air Control Wing, 330th Combat Training Squadron

major field test, GYPSY DELTA. However the JGPSCE Service deputies, the GC Test Manager, and several key analysts hit the briefing trail. Since early January, the GC Test Manager and the Service deputies have been criss-crossing the country each week talking about the significant findings of the GYPSY CHARLIE test.

The audiences included Army and Air Force operational test agencies, HQ USJFCOM, HQ USSTRATCOM, OSD and Joint Staff action officers, USAF XOR and XO1, HQ Air Combat Command, U.S. Army TRADOC, and the Air Force's Air Warfare Center. Future presentations are scheduled for the GPS Joint Program Office, the Naval Strike Air Warfare Center, the Air, Land, Sea Applications Center, and the U.S. Air Force Doctrine Center. Presentations to Combatant Command staffs are also in the works.

For more information about the GYPSY CHARLIE test contact Lt Col Vic White, GYPSY CHARLIE Test Manager, at (505) 853-0364 (DSN 263), e-mail [john.white@afotec.af.mil](mailto:john.white@afotec.af.mil) or Mr. Denny Lester, JGPSCE Technical Director, at (505) 853-7395 (DSN 263), email [dennis.lester@afotec.af.mil](mailto:dennis.lester@afotec.af.mil).

## NAVWAR MOU

In this era of ever-increasing coalition partnership, it is no surprise the DoD has agreements with our closest allies in the area of Navigation Warfare (Navwar). One such agreement is the "Cooperation in Navigation Warfare Technology Demonstrator and Systems Prototypes Projects Memorandum of Understanding." This agreement, known more simply as the NAVWAR MOU, provides for the mutual:

1. Exchange of Navwar information.
2. Observation of Navwar tests, trials, and demonstrations
3. Cooperative Navwar testing.

As the DoD's only joint Navwar test organization, JGPSCE is in the forefront of this initiative as a standing member of the US delegation as well as the overall coalition lead for two Project Arrangements (PA) under the Navwar MOU - the Test Methodology Project Arrangement PA, and the Tests, Trials, and Demonstrations (TTD) PA. Under the first, JGPSCE is cooperatively developing a standardized Navwar test methodology to facilitate comparative analysis amongst the Navwar MOU partner nations. Under the second, JGPSCE facilitates mutual observation of partner nation's Navwar events, integrates international cooperative testing among the Navwar MOU nations, as well as drafting the Navwar Range & Facilities Compendium. This last item, officially the "International NAVWAR Ranges & Facilities Compendium", was recently completed and distributed by JGPSCE at Navwar MOU Steering Committee meeting held in Sydney, Australia, from December 1-10, 2003. The document was well received and garnered praise from the Steering Committee leads of all the partner nations.

JGPSCE was requested to brief their GYPSY test results to the Canadian Forces General Staff in Ottawa, Canada, February 26, 2004. They were also invited by the US delegation to the NATO Steering Committee 8, which deals with Navwar, to provide a similar brief to the NATO audience at their meeting in Rome, Italy, March 15-19, 2004. JGPSCE point of contact is Major West "GHOST" Kasper, USAF at (505) 853-0293 (DSN 263) or email [West.Kasper@afotec.af.mil](mailto:West.Kasper@afotec.af.mil). • □

## JCMD ST-2

Joint Cruise Missile Defense (JCMD) Joint Test and Evaluation (JT&E) conducted the Simulation Test Two (ST-2) from March 1-10, 2004 at the Virtual Warfare Center (VWC), St. Louis, MO. JCMD has established a rigorous test methodology that includes conducting separate Field and Simulation events that are to replicate operationally realistic conditions against the full spectrum air defense threat.

JCMD received tremendous support from each of the Services during the event. Tactical operators from the Army, Navy, Air Force and Marines participated in the planning, execution, and after-action review of 20 individual scenario runs. JCMD selected a Southwest Asia Scenario as the venue for ST-2, named "Operation Open Passage II". JCMD provided operators from the different Services mission overview, details of prior mission planning, and an intelligence briefing as a lead in to mission execution. The operators conducted a mission analysis and were able to refine the defense design built during the Final Planning Conference. This design was based on the threat, which included Theater Ballistic Missiles, Air Breathing Threats, and Cruise Missiles, to best defend their designated assets. This defense design established the final Joint Integrated Air Defense System configuration used during the simulation runs.

The core element of the event entailed the execution of twenty actual missions on the Operator in the Loop (OITL) JIADS Systems that were developed and demonstrated at various facilities across the country. These facilities include the VWC, the AWACS Integration Lab (AIL) in Seattle, WA; the Aegis Training and Readiness Center (ATRC) in Dahlgren, VA; the Distributed Mission Operations Center (DMOC) in Albuquerque, NM; the C4I Enterprise Integration Facility (CEIF) at Hanscom AFB, MA; the E-2C System Test Evaluation Lab (ESTEL) at Patuxent River, MD; and the Patriot simulation at Ft. Bliss, TX.

Operational units from the four Services provided the system operators while JCMD provided the White Cell, simulation execution, data collection, analysis, and mission support personnel. Manned operator-in-the-loop systems include the Joint Air Operations Center, Ballistic Missile Defense Operations Cell, TST/TCT Cell, Control and Reporting Center, Tactical Air Operations Center, Complementary Low Altitude Weapons System, Patriot, AWACS, F-15C, E-2C, Air Battle Management Operations Center with SHORAD, and Aegis Command Information Center with Cooperative Engagement Capability to the E-2C. • □



## JT&E UNIVERSITY Administrative Training 101

The JT&E Program Office plans to hold its annual Administrative Training Course on August 3-4, 2004 in Portsmouth, Virginia. This year it will be a two-day, comprehensive course with a JT&E Reference Manual for attendees to take with them.

The following topics will be covered:

Administrative Details

General DOT&E/JT&E Guidance

Editing Website

Library                      Logistics and Property

Outreach                  Personnel and Awards

Security                    Travel

The purpose of this course is to provide information necessary to answer questions about the JT&E Program. It will also provide contacts for follow up questions. The objective is to have the Reference Manual serve as a tool for more efficient JT&E project execution. The staff members affected by each topic on the syllabus should attend this training course, including the Office Manager/Admin support, Logistics, Security personnel, and Technical Editor/Writer.

## GPS WARFIGHTER CONFERENCE

In October 2003, JGPSCE started an initiative to host a joint GPS conference targeted at US warfighters. The goals were two-fold: 1) to educate the warfighter on GPS fundamentals, and 2) present a broad array of topics relating to threats and capabilities that they could apply to their operational missions. After canvassing a broad range of organizations within the DoD for interest and feedback, and looking at what other GPS-related conferences were already scheduled, JGPSCE teamed with the annual Joint Navigation Conference (JNC) to present warfighter-focused sessions of interest to all attendees.

The JNC is the largest annual military GPS conference. This year the JNC met May 3-6 at the Riviera Hotel & Casino in Las Vegas, NV. Over 425 participants were pre-registered representing a broad spectrum of DoD. Nine foreign countries were represented.

Most significantly, JGPSCE partnered with USSTRATCOM to co-host/co-chair this year's classified sessions of the JNC, held at the RED FLAG auditorium on Nellis AFB. JGPSCE POC is Major West "GHOST" Kasper, USAF at (505) 853-0293 (DSN 263) or email

[WestKasper@afotec.af.mil](mailto:WestKasper@afotec.af.mil).

## THE TIMES THEY ARE A'CHANGIN

Next quarter you'll find a different look for the newsletter and a different editor to give it that look. I've been editing the JT&E Newsletter since it came into existence, about 4 years ago. It's been a lot of fun, the employees have been wonderful with sending their articles and photos, and I hope everyone has enjoyed reading it. But now it's time for me to move on and I'll be handing over the reins to the next selected editor. I will leave behind a bit of a message that reached me one day and I think of regularly:

I wish you enough sun to keep your attitude bright.

I wish you enough rain to appreciate the sun more.

I wish you enough happiness to keep your spirit alive.

I wish you enough loss to appreciate all that you possess.

I wish enough "Hello's" to get you through the final "Good-bye."

My friends and loved ones, I wish you ENOUGH!!! *Lydia*

# JT&E CALENDAR

2004	JUN	JUL	AUG	SEP	OCT
CJTFEX	12-21				
SAC		21 Pentagon			
Test Directors Meeting			3 Norfolk		
Administrative Training			3-4 Norfolk		
JT&E Booth		30—Sep 2 ITEA Army T&E Days Huntsville		13—15 AFA WDC  14—16	24—27 AUSA WDC
TAB					TBD

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